

**Amendments to the Drawings:**

There are no Amendments to Drawings.

### **REMARKS/ARGUMENTS**

The Office Action of October 29, 2007 stated that the Request for Continued Examination, fee and amendment were considered proper and were entered. Further, the Examiner stated that because Applicant uses the term "preferably" in Claim 35 the claim will **not** be read on the preferred embodiments.

Claims 34 – 39 are rejected under 35 U.S.C. § 112, 2<sup>nd</sup> ¶, as being indefinite. Specifically, the scope of Claim 34 or any claim dependent on claim 34 is alleged to be unclear. The formula in line 2 appears to require the presence of hafnium, copper, nickel and aluminum but, line 5 appears to indicate that aluminum is optional provided that Hf, Cu, Ni are eutectially combined with at least one of Al, Ti, or Nb. Dependent claim 35 states that the alloy comprises hafnium, copper, & nickel implying that some embodiment of the independent claim would not comprise all of these elements. Claims 36-39 state "(T)he alloy" is in eutectic combination with various other elements but, this is does not reflect the invention where hafnium, copper and nickel are in eutectic combination with the elements in the dependent claims. Lastly, the Examiner questions how Ti and Nb could be present without being "in combination thereof".

Claims 1-6, 9, 11-15, 28, 30, 31 and 34-39 are rejected under 35 U.S.C. § 103(a) as obvious from Gu *et al.*

Claims 1-39 are provisionally rejected on the ground of obviousness-type double patenting over co-pending derivative application number 10/946,132 claims 152-160. Applicants respectfully traverse each objection to the specification and drawings and each rejection of the claims.

The Notice of Non-Compliant Amendment of 03/25/2008 noted that a newly added claim was improperly underlined. Correction is made in this submission.

#### **Acknowledgement and Summary of Telephone Interview**

Applicant thanks the Examiner for the extensive discussion of this Application owned by the United States as represented by the Secretary of the Army (Army) and Application 10/946,132 owned and filed by a contractor of the Army. The telephone interview was between the Examiner, George P. Wyszomierski, A. David Spevack, an Attorney for the Army, and the inventor, Dr. Laszlo J. Kecskes. Because Dr. Kecskes is a named inventor in both applications, he was privy to information that the Army attorney did not have. Dr. Kecskes described at great length how he made the invention of the instant invention and went looking for a contractor to produce the "glass" in bulk quantities. The contractor was shown how to make the product of the

instant invention by one method and devised an improved process for bulk production by the method that became the subject of the 10/946,132 application. Obviously, the inventors of the 10/946,132 invention derived concept from Dr. Keeskes and that application is filed later in time than the instant invention.

Dr. Keeskes and the Examiner discussed the Gu reference which is discussed in greater detail below. In summary, Gu describes glasses that are not limited to containing hafnium. In the instant invention, all the glasses contain hafnium

The Examiner clarified what his problems were with Claims 34-39 and 35 U.S.C. § 112. Applicant has attempted to correct the issues by breaking Claim 34 into Amended Claim 34 and new Claim 40 so that Claim 34 is no longer trying to cover a generic invention and a species under that genus. Once again, the Examiner is thanked for his helpful suggestions.

**Rejections under 35 U.S.C. § 112**

Claims 34 – 39 are rejected under 35 U.S.C. § 112, 2<sup>nd</sup> ¶, as being indefinite. Specifically, the scope of Claim 34 or any claim dependent on claim 34 is alleged to be unclear. The formula in line 2 appears to require the presence of hafnium, copper, nickel and aluminum but, line 5 appears to indicate that aluminum is optional provided that Hf, Cu, Ni are eutectially combined with at least one of Al, Ti, or Nb. Dependent claim 35 states that the alloy comprises hafnium, copper, and nickel implying that some embodiment of the independent claim would not comprise all of these elements. Claims 36-39 state “(T)he alloy” is in eutectic combination with various other elements but, this is does not reflect the invention where hafnium, copper and nickel are in eutectic combination with the elements in the dependent claims. Lastly, the Examiner questions how Ti and Nb could be present without being “in combination thereof”. Applicants respectfully traverse this rejection in view of the above amendments.

Applicants have amended Claims 34 – 39 to remove any confusion by breaking Claim 34 into two (2) claims Amended Claim 34 and newly presented Claim 40 to a species within the genus of Claim 34 amended. This should clarify some confusion caused by what was clearly meant to be two claims. Claims 35 – 39 have been amended to simplify the language and remove any potential redundancies. It is believed that Claims 34 – 40 are now in condition for allowance.

**Rejections under 35 U.S.C. § 103**

Claims 1-6, 9, 11-15, 28, 30, 31 and 34-39 are rejected under 35 U.S.C. § 103(a) as obvious from Gu *et al.* Applicant respectfully traverses this rejection because all of the claims contain hafnium in specific combinations.

The intent of Gu et al. is to produce a series of metallic alloys with the presence of Zr, demonstrating the extreme difficulty of forming a good glass forming alloy based on direct Hf substitution for Zr. Although, a reverse dilution of a Hf-based alloy is possible with Zr, the intent of the Applicants, in contrast to that of Gu, are to produce a purely Hf-based metallic glass alloy without the presence of Zr. All the alloy combinations of the claims contain hafnium, copper and nickel. Applicant's invention is clearly differentiated from that of Gu and the claims are now in condition for allowance.

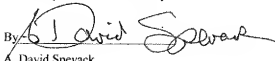
**Provisional Double Patenting Rejection**

Claims 1-39 are provisionally rejected on the ground of obviousness-type double patenting over co-pending derivative application number 10/946,132 claims 152-160. Applicants respectfully traverse each objection to the specification and drawings and each rejection of the claims.

As discussed above, the invention of the other application was derived from Applicant, Dr. Keeskes. On information from Dr. Keeskes, it is believed by the undersigned attorney, that the conflicting claims were deleted from the other application. If the Examiner disagrees, a derivation case should be declared but otherwise, Applicant believes there is no conflict between the inventions of the two applications and the current application is the senior application.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case. The Director is hereby authorized to charge any additional fees or underpayments under 37 C.F.R. § 1.16 & 1.17; and credit any overpayments to Deposit Account No. 19-2201 held in the name of U.S. Army Materiel Command.

Respectfully submitted,  
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U.S. Army Research Laboratory

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